

**Supplemental Table S1.** Search Algorithms Used to Identify Studies

	MEDLINE - OVID	EMBASE - OVID	COCHRANE RCT - OVID	CINAHL - EBSCO	SPORTDiscus - EBSCO
<b>Concept 1 Subject Headings</b>	<i>Child/ Adolescent/ Pediatrics/</i>	<i>Child/ Adolescent/ Pediatrics/</i>	<i>Child/ Adolescent/ Pediatrics/</i>	MH child OR MH adolescence OR MH Pediatrics	SU Children OR SU Teenagers OR SU Pediatrics
<b>Concept 1 Key Word Search</b>	<i>((high or secondary or middle or elementary) adj2 school*).ti,ab</i>  <i>(skeletal* adj3 immatur*).ti,ab.</i>  <i>(child* or young* or juvenile* or kid* or adolescen* or teen* or youth* or p?ediatric* or prepubescent*).ti,ab.</i>	<i>((high or secondary or middle or elementary) adj2 school*).ti,ab</i>  <i>(skeletal* adj3 immatur*).ti,ab.</i>  <i>(child* or young* or juvenile* or kid* or adolescen* or teen* or youth* or p?ediatric* or prepubescent*).ti,ab.</i>	<i>((high or secondary or middle or elementary) adj2 school*).ti,ab</i>  <i>(skeletal* adj3 immatur*).ti,ab.</i>  <i>(child* or young* or juvenile* or kid* or adolescen* or teen* or youth* or p?ediatric* or prepubescent*).ti,ab.</i>	TI (((high or secondary or middle or elementary) N2 school*) ) OR AB ( ((high or secondary or middle or elementary) N2 school*) )  TI (skeletal* N3 immatur*) OR AB (skeletal* N3 immatur*)  TI ( (child* or young* or juvenile* or kid* or adolescen* or teen* or youth* or p#ediatric* or prepubescent*) ) OR AB ( (child* or young* or juvenile* or kid* or adolescen* or teen* or youth* or p#ediatric* or prepubescent*) )	TI ( (high or secondary or middle or elementary) N2 school*) ) OR AB ( (high or secondary or middle or elementary) N2 school*) )  TI (skeletal* N3 immatur*) OR AB (skeletal* N3 immatur*)  TI ( (child* or young* or juvenile* or kid* or adolescen* or teen* or youth* or p#ediatric* or prepubescent*) ) OR AB ( (child* or young* or juvenile* or kid* or adolescen* or teen* or youth* or p#ediatric* or prepubescent*) )
<b>Concept 1 (final)</b>	1 or 2 or 3 or 4	1 or 2 or 3 or 4	1 or 2 or 3 or 4	S1 or S2 or S3 or S4	S1 or S2 or S3 or S4
<b>Concept 2 Subject Headings</b>	exp Anterior Cruciate Ligament Reconstruction/	exp Anterior Cruciate Ligament Reconstruction/	exp Anterior Cruciate Ligament Reconstruction/	MH anterior cruciate ligament reconstruction	SU anterior cruciate ligament surgery
<b>Concept 2 Key Word Search</b>	<i>((ACL or anterior cruciate ligament) adj4 (reconstruction* or repair* or graft* or surger* or operat*).ti,ab.</i>	<i>((ACL or anterior cruciate ligament) adj4 (reconstruction* or repair* or graft* or surger* or operat*).ti,ab.</i>	<i>((ACL or anterior cruciate ligament) adj4 (reconstruction* or repair* or graft* or surger* or operat*).ti,ab.</i>	TI ( ((ACL or anterior cruciate ligament) N4 (reconstruction* or repair* or graft* or surger* or operat*)) ) OR AB ( ((ACL or anterior cruciate ligament) N4 (reconstruction* or repair* or graft* or surger* or operat*)) )	TI ( ((ACL or anterior cruciate ligament) N4 (reconstruction* or repair* or graft* or surger* or operat*)) ) OR AB ( ((ACL or anterior cruciate ligament) N4 (reconstruction* or repair* or graft* or surger* or operat*)) )
<b>Concept 2 (final)</b>	6 or 7	6 or 7	6 or 7	S6 or S7	S6 or S7

	MEDLINE - OVID	EMBASE - OVID	COCHRANE RCT - OVID	CINAHL - EBSCO	SPORTDiscus - EBSCO
<b>Concept 3 Subject Headings</b>	return to sport/	return to sport/	"Recovery of Function"/	MH Sports Re-Entry	SU Sport Participation
<b>Concept 3 Key Word Search</b>	(return* to adj3 (sport* or play* or activit* or athletic* or participation*)).ti,ab.	(return* to adj3 (sport* or play* or activit* or athletic* or participation*)).ti,ab.	(return* to adj3 (sport* or play* or activit* or athletic* or participation*)).ti,ab.	TI ( ("return* to" N3 (sport* or play* or activit* or athletic* or participation*)) ) OR AB ( ("return* to" N3 (sport* or play* or activit* or athletic* or participation*)) ) )	TI ( ("return* to" N3 (sport* or play* or activit* or athletic* or participation*)) ) OR AB ( ("return* to" N3 (sport* or play* or activit* or athletic* or participation*)) ) )
<b>Concept 3 (Final)</b>	9 or 10	9 or 10	9 or 10	S9 or S10	S9 or S10
<b>Language</b>	English or French	English or French	English or French	English or French	English or French
<b>Years</b>	2000-2021	2000-2021	2000-2021	2000-2021	2000-2021
<b>Final search</b>	5 and 8 and 11	5 and 8 and 11	5 and 8 and 11	S5 AND S8 AND S11	S5 AND S8 AND S11
<b>Date Search Executed</b>	May 31 <sup>st</sup> , 2021	May 31 <sup>st</sup> , 2021	May 31 <sup>st</sup> , 2021	May 31 <sup>st</sup> , 2021	May 31 <sup>st</sup> , 2021

**Supplemental Table S2. Results of MINORS Assessment**

Study	Clearly stated aim	Inclusion of consecutive patients	Prospective collection of data	Endpoints appropriate to the aim of study	Unbiased assessment of the study endpoint	Follow-up period appropriate to the aim of the study	Loss to follow-up less than 5%	Prospective calculation of study size		An adequate control group	Contemporary groups	Baseline Equivalence of groups	Adequate statistical analysis	Total Quality Score MINORS
Anderson, 2003	1	1	1	1	0	1	2	0		N/A	N/A	N/A	N/A	7
Aronowitz et al., 2000	1	1	1	2	0	2	1	0		N/A	N/A	N/A	N/A	8
Calvo et al., 2015	2	1	1	2	0	2	2	0		N/A	N/A	N/A	N/A	10
Fourman et al., 2021	2	2	2	2	0	2	1	1		N/A	N/A	N/A	N/A	12
Gagliardi et al., 2020	1	2	1	1	0	2	1	0		N/A	N/A	N/A	N/A	8
Goddard et al., 2013	1	2	2	2	0	2	2	0		N/A	N/A	N/A	N/A	11
Graziano et al., 2017	2	2	2	2	0	2	2	0		N/A	N/A	N/A	N/A	12
Johnson et al., 2020	2	1	2	2	2	2	2	2		2	2	2	2	23
Kocher et al., 2018	2	2	2	2	0	2	1	1		N/A	N/A	N/A	N/A	12
Lanzetti et al., 2020	1	1	1	1	0	2	2	0		N/A	N/A	N/A	N/A	8
Larson et al., 2016	2	2	1	2	0	2	2	2		N/A	N/A	N/A	N/A	13
Luo et al., 2015	2	1	1	2	0	2	2	0		2	2	2	2	18
Nikolaou et al., 2011	1	2	1	1	0	2	2	1		N/A	N/A	N/A	N/A	10
Pennock et al., 2018	1	1	1	2	0	2	1	0		N/A	N/A	N/A	N/A	8
Pennock et al., 2019	2	2	1	2	0	2	1	0		2	2	2	2	18
Salmon et al., 2018	2	2	2	2	1	2	1	1		2	2	2	2	21
Sankar et al., 2006	1	2	1	1	0	2	2	2		2	2	2	2	19
Sankar et al., 2008	2	2	1	2	0	2	1	0		N/A	N/A	N/A	N/A	10
Severyns et al., 2016	2	0	1	2	0	2	2	0		N/A	N/A	N/A	N/A	9
Shelbourne et al., 2004	2	1	2	2	0	2	2	0		N/A	N/A	N/A	N/A	11
Shelbourne et al., 2009	2	2	2	2	0	2	2	0		2	2	2	2	20
Shelbourne et al., 2009	2	1	2	2	0	2	1	0		2	2	2	2	18
Streich et al., 2010	1	0	1	2	0	2	1	0		2	2	2	2	15
Sugimoto et al., 2020	2	2	1	2	0	2	2	0		N/A	N/A	N/A	N/A	11
Wall et al., 2017	2	1	1	2	0	2	1	0		N/A	N/A	N/A	N/A	9
Willimon et al., 2015	1	1	2	1	0	1	2	0		N/A	N/A	N/A	N/A	8
Willson et al., 2018	2	1	1	2	0	2	2	0		N/A	N/A	N/A	N/A	10

**Supplemental Table S3. Studies Excluded for Insufficient Description of Return-to-Activity Criteria**

1.	Butler RJ, Dai B, Huffman N, Garrett WE, Queen RM. Lower extremity movement differences persist after anterior cruciate ligament reconstruction and when returning to sports. <i>Clin J Sport Med.</i> 2016;26(5):411-416.
2.	Cordasco FA, Mayer SW, Green DW. All-Inside, All-epiphyseal anterior cruciate ligament reconstruction in skeletally immature athletes: return to sport, incidence of second surgery, and 2-year clinical outcomes. <i>Am J Sports Med.</i> 2017;45(4):856-863.
3.	Costa Astur D, Victor Novaretti J, Borges Cavalcante L, et al. Pediatric Anterior cruciate ligament reruptures are related to lower functional scores at the time of return to activity: a prospective, midterm follow-up study. <i>Orthop J Sports Med.</i> 2019;7(12):2325967119888888.
4.	DeFrancesco CJ, Striano BM, Bram JT, Baldwin KD, Ganley TJ. An in-depth analysis of graft rupture and contralateral anterior cruciate ligament rupture rates after pediatric anterior cruciate ligament reconstruction. <i>Am J Sports Med.</i> 2020;48(10):2395-2400.
5.	Ellis HB, Matheny LM, Briggs KK, Pennock AT, Steadman JR. Outcomes and revision rate after bone-patellar tendon-bone allograft versus autograft anterior cruciate ligament reconstruction in patients aged 18 years or younger with closed physes. <i>Arthroscopy.</i> 2012;28(12):1819-1825.
6.	Ellis HB, Sabatino M, Nwelue E, Wagner KJ, Force E, Wilson P. The use of psychological patient reported outcome measures to identify adolescent athletes at risk for prolonged recovery following an ACL reconstruction. <i>J Pediatr Orthop.</i> 2020;40(9):844-852.
7.	Engelman GH, Carry PM, Hitt KG, Polousky JD, Vidal AF. Comparison of allograft versus autograft anterior cruciate ligament reconstruction graft survival in an active adolescent cohort. <i>Am J Sports Med.</i> 2014;42(10):2311-2318.
8.	Placella G, Bartoli M, Peruzzi M, Speziali A, Pace V, Cerulli G. Return to sport activity after anterior cruciate ligament reconstruction in skeletally immature athletes with manual drilling original all inside reconstruction at 8 years follow-up. <i>Acta Orthop Traumatol Turc.</i> 2016;50(6):635-638.
9.	Gagliardi AG, Carry PM, Parikh HB, Traver JL, Howell DR, Albright JC. ACL repair with suture ligament augmentation is associated with a high failure rate among adolescent patients. <i>Am J Sports Med.</i> 2019;47(3):560-566.
10.	Ghosh K, Salmon LJ, Heath E, Pinczewski LA, Roe JP. Transphyseal anterior cruciate ligament reconstruction using living parental donor hamstring graft: excellent clinical results at 2 years in a cohort of 100 patients. <i>Knee Surg Sports Traumatol Arthrosc.</i> 2020;28(8):2511-2518.
11.	Grassi A, Macchiarola L, Lucidi GA, et al. Anterior cruciate ligament reconstruction and lateral plasty in high-risk young adolescents: revisions, subjective evaluation, and the role of surgical timing on meniscal preservation. <i>Sports Health.</i> 2022;14(2):188-196.
12.	Hui C, Roe J, Ferguson D, Waller A, Salmon L, Pinczewski L. Outcome of anatomic transphyseal anterior cruciate ligament reconstruction in Tanner stage 1 and 2 patients with open physes. <i>Am J Sports Med.</i> 2012;40(5):1093-1098.
13.	Jacobs CA, Malempati CS, Johnson DL, Burnham JM, Makhni E, Swart E. Allograft augmentation of hamstring autograft for younger patients undergoing anterior cruciate ligament reconstruction. <i>Am J Sports Med.</i> 2017;45(4):892-899.
14.	Melugin HP, Desai VS, Camp CL, et al. Do tibial eminence fractures and anterior cruciate ligament tears have similar outcomes? <i>Orthop J Sports Med.</i> 2018;6(12):2325967118811854.
15.	Morgan MD, Salmon LJ, Waller A, Roe JP, Pinczewski LA. Fifteen-year survival of endoscopic anterior cruciate ligament reconstruction in patients aged 18 years and younger. <i>Am J Sports Med.</i> 2016;44(2):384-392.
16.	Mueske NM, Patel AR, Pace JL, et al. Improvements in landing biomechanics following anterior cruciate ligament reconstruction in adolescent athletes. <i>Sport Biomech.</i> 2018;19(6):738-749.
17.	O'Brien AO, Stokes J, Bompadre V, Schmale GA. Concomitant anterior cruciate ligament reconstruction and temporary hemiepiphysiodesis in the skeletally immature: a combined technique. <i>J Pediatr Orthop.</i> 2019;39(7).
18.	Pennock AT, Ho B, Parvanta K, et al. Does allograft augmentation of small-diameter hamstring autograft ACL grafts reduce the incidence of graft retear? <i>Am J Sports Med.</i> 2017;45(2):334-338.
19.	Saper M, Wong C, Strauss N. Adolescent Patients exhibit significant improvements in strength and functional performance from 6 to 9 months after ACL reconstruction with quadriceps autograft. <i>Arthrosc Sport Med Rehabil.</i> 2021;3(3):e837-e843.
20.	Schmale GA, Kweon C, Larson R V., Bompadre V. High satisfaction yet decreased activity 4 years after transphyseal ACL reconstruction. <i>Clin Orthop Relat Res.</i> 2014;472(7):2168-2174.
21.	Dekker TJ, Godin JA, Dale KM, Garrett WE, Taylor DC, Riboh JC. Return to sport after pediatric anterior cruciate ligament reconstruction and its effect on subsequent anterior cruciate ligament injury. <i>J Bone Joint Surg Am.</i> 2017;99(11):897-904.
22.	Vanderhave KL, Moravek JE, Sekiya JK, Wojtys EM. Meniscus tears in the young athlete: Results of arthroscopic repair. <i>J Pediatr Orthop.</i> 2011;31(5):496-500.
23.	Wilson PL, Wyatt CW, Wagner KJ 3rd, Boes N, Sabatino MJ, Ellis HB. Combined transphyseal and lateral extra-articular pediatric anterior cruciate ligament reconstruction: a novel technique to reduce ACL reinjury while allowing for growth. <i>Am J Sports Med.</i> 2019;47(14):3356-3364.